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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,770	03/31/2001	Anil K. Annadata	M-11405 US	6431

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EXAMINER

NGUYEN, QUYNH H

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/823,770

Applicant(s)

ANNADATA ET AL.

Examiner

Quynh H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Response to Amendment***

2. Applicant's amendment filed on December 28, 2005 has been entered. Claims 1, 13, and 23 have been amended. No claims have been cancelled. No claims have been added. Claims 1-41 are still pending in this application, with claims 1, 13, and 23 being independent.

#### ***Claim Rejections - 35 USC § 103***

3. Claims 1- 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dilip et al. (U.S. Patent 6,704,409) in view of Crowther et al. (U.S. Patent 6,771,765).

Regarding claims 1, 13, and 23, Dilip et al. teach maintaining real-time data for multi-channel communication queuing (abstract and col. 2, lines 24-37); forming a list of agent data depending on area of expertise (col. 5, line 67 through col. 6, line 3).

Furthermore, in the customer service center, agents grouped together based on type of devices the agents may utilize as necessary for load balancing. This is the obvious (if not inherent) way to operate a customer service center. This is the nature of the customer service center. The agent data includes authorization information, wherein the authorization information is configured to indicate which of a plurality of types of

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communication media the agent is authorized to access (col. 7, lines 42-54 - *an agent is authorized to log into the computer*). For example, an agent handling only telephone call transactions may only use a telephone without requiring a computer or the status of this agent is not text / email messages; an agent handling only e-mail messages may require a computer system, but not a telephone or the status of this agent is no voice calls.

However, Dilip et al. do not explicitly teach status information regarding a corresponding status of the agent for each of the types of communication media.

Crowther et al. teaches if the status information regarding a corresponding status of the agent who is busy handling the type of communication media that has the highest interruptibility level (such as voice or phone call) which cannot be interrupted (col. 7, lines 38-46; col. 8, lines 14-20). On the other hand, removing agent from the idle agent queues or lower interruptibility level (such as email or fax) to prevent other calls getting to the agent while the agent is busy, which can be interrupted by higher / highest interruptibility level requests such as voice call (col. 7, lines 38-46; col. 8, lines 14-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Crowther into the teachings of Dilip for the purpose of providing better, faster, and professional services to customers. Also, this will enhance the efficiency of call center.

Regarding claims 2, 14, and 24, Dilip et al. teach the data includes information related to the agent's skills (col. 5, lines 12-21 and col. 6, lines 1-3).

Regarding claims 3, 15, and 25, Dilip et al. teach maintaining a list of media route (col. 5, line 45 through col. 6, line 28).

Claims 4-6 recite the language **"at least one of..."** and therefore only one element is needed to be addressed. For example, compiling statistic of the media routes or for a communication channel of a specific media type including at least one of: waiting time during a period, handling time during a period (col. 11, lines 58-60), number of abandon requests, longest waiting time, percentage of available agent, number of work item, and number of work items delivered to an agent, the statistic of the media routes may only have number of work items delivered to an agent.

Similarly, claims 16-18 and 26-28 recite the language "including at least one of" percentage of available agent / availability percent (col. 12, lines 10-12).

Regarding claims 7, 19, and 29, Dilip et al. teach compiling at least one of: the route for the work items (Fig. 2 and col. 6, lines 49-58).

Regarding claims 8, 20, and 30 Dilip et al. teach assigning a priority value to the media routes (abstract, lines 8-10, col. 6, lines 29-38, and col. 7, lines 42-49).

Regarding claims 9, 10, 21, 22, 31, and 32, Dilip et al. do not teach setting a maximum number of queued items for the media routes and a time for escalating a work item. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the mentioned above feature into Dilip's system in order to better manage the customer service center.

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Claims 11 and 12 are rejected are rejected for the same reasons discussed above with respect to claim 1. Furthermore, Dilip et al. teach controller 11 that contains computer instructions to implement the method of these claims (col. 15, lines 20-31).

Regarding claims 33, 36, and 39 Dilip et al. teach each corresponding status of a plurality of corresponding statuses corresponds to a different type of communication media (col. 5, lines 9-21). For example, an agent handling only telephone call transactions may only use a telephone without requiring a computer or the status of this agent is not text / email messages; an agent handling only e-mail messages may require a computer system, but not a telephone or the status of this agent is no voice calls.

Regarding claims 34, 37, and 40 Dilip et al. teach the agent data includes an amount of time the agent has worked on an active work item using each communication media (col. 3, lines 53-65; col. 11, lines 58-60).

Regarding claims 35, 38, and 41 Dilip et al. teach corresponding status of the agent is maintained in real-time (col. 13, lines 30-40).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-41 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments are addressed in the above claims rejections.

Applicant argues (remarks, page 12) that "an agent might be unavailable to take a telephone call, but the telephone system would not inherently know that the agent is

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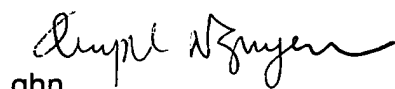
unavailable". Examiner disagrees because in the case a plurality of types of communication media an agent is authorized to access is telephone only, then if an agent is unavailable to take a telephone call that means the agent is busy on the phone, unless the agent is taking some kind of break which is not recited in the claims.

Applicant argues (remarks, page 12) that "Dilip does not discuss keeping track of a status for an agent with respect to using email". This is not in the claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 703-305-5451. The examiner can normally be reached on Monday - Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan, can be reached on 571-273-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



qhn  
Quynh H. Nguyen  
March 15, 2006